

Substitute for form 1448A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/043,818
Filing Date	1/11/2002
First Named Inventor	Dapper
Art Unit	2617
Examiner Name	William D. Cumming
Attorney Docket Number	100.070US31

Sheet 1 of 30

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 20010001618	05-24-2001	RAKIB et al	
		US- 20010024474	09-27-2001	RAKIB et al	
		US- 20010032334	10-18-2001	DAPPER et al	
		US- 20010033611	10-25-2001	GRIMWOOD et al	
		US- 20010055319	12-27-2001	QUIGLEY et al.	
		US- 20020012421	01-31-2002	GELE et al.	
		US- 20020015423	02-07-2002	RAKIB et al.	
		US- 20020015477	02-07-2002	GELE et al.	
		US- 20020061012	05-23-2002	THI et al.	
		US- 20020090909	07-11-2002	DAPPER et al.	
		US- 20020098795	07-25-2002	BREDE et al.	
		US- 20020098796	07-25-2002	DAPPER et al.	
		US- 20020098797	07-25-2002	BREDE et al.	
		US- 20020098798	07-25-2002	SOLIM et al.	
		US- 20020102937	08-01-2002	DAPPER et al.	
		US- 20020105950	08-08-2002	DAPPER et al.	
		US- 20020108080	08-08-2002	DAPPER et al.	
		US- 20020107979	08-08-2002	SARNIKOWSKI et al.	
		US- 20020118719	08-22-2002	DAPPER et al.	
		US- 20030028262	02-06-2003	GROSS et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ² - Kind Code ³ (if known)				
		CA - 1204230	05-06-1986	STREHL		
		CA - 2051252	03-15-1992	SAILER		
		DE - 3403208	08-01-1985	GUENDNER et al.		
		DE - 4019725	01-02-1962	DRESSLER		
		DE - 4019726	01-02-1992	DRESSLER		

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		Examiner Name	William D. Cumming
		Attorney Docket Number	100 070US31
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NON PATENT LITERATURE DOCUMENTS

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		"ADC TELECOMMUNICATIONS NETWORK CONFIGURATION," ADVERTISING LITERATURE, Page(s) 1, Publisher: ADC TELECOMMUNICATIONS INC.	
		AIKAWA, "PERFORMANCE OF TRELIS CODED 256 Q2M SUPER MULTICARRIER MODEM USING VLSI's FOR SDH INTERFACE OUTAGE FREE DIGITAL MICROWAVE RADIO," <u>IEEE TRANSACTIONS ON COMMUNICATION</u> , 2/1994, Page(s) 1415-1421, Volume 24, Number 2-3-4, Publisher: IEEE	
		ANDRES, "OSS, A MUST FOR FIBER TO THE CURB," <u>TE & M</u> , 7/15/90, Page(s) 1-3	
		"AUTOMATIC PROTECTION SWITCHING (APS)," <u>TR-TSY-000253-5.3</u> , 9/1989, Page(s) 5.4-5.6, 9.1, Number 1	
		BAGGETT, "COST FACTORS RELATIVE TO THE FIBEROPTIC BACKBONE SYSTEM," <u>1988 NCTA TECHNICAL PAPERS</u> , 1988, Page(s) 102-106, Publisher: NCTA	
		BERNIER, "ROCHESTER TEL TAPS ADC FOR VIDEO TRIAL," <u>TELEPHONY</u> , 5/31/93, Page(s) 8, 10	
		BICKERS ET AL, "PLANS FOR THE BISHOPS STORTFORD (UK) FIBRE TO THE HOME TRIALS," <u>BRITISH TELECOM RESEARCH LABORATORIES</u> , 1990, Page(s) 203.1.1 - 203.1.5, Publisher: IEEE	
		"CABLEPHONE, TELEPHONY FOR THE CABLE INDUSTRY," PRODUCT BROCHURE, Page(s) 1-3	

Examiner Signature		Date Considered	
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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 20030032390	02-13-2003	GEILE et al	
		US- 20030043928	03-06-2003	LING et al	
		US- 20040042387	03-04-2004	GEILE	
		US- RE33900	04-29-1992	HOWSON	
		US- 3539924	11-10-1970	DASKALAKIS et al	
		US- 3609328	09-28-1971	KIEBURTZ	
		US- 3629057	12-14-1971	MUELLER	
		US- 3700820	10-24-1972	BLASBALG et al.	
		US- 3708933	12-19-1972	BIDELL et al.	
		US- 3742145	06-26-1973	CLARK et al.	
		US- 3750022	07-31-1973	CURRY et al	
		US- 3750175	07-31-1973	LOCKERD et al.	
		US- 3796970	03-12-1974	SNELL Jr	
		US- 3805285	04-18-1974	LESTER	
		US- 3838343	08-24-1974	YACTOR	
		US- 3888805	02-25-1975	POOLE	
		US- 3934224	01-20-1976	DULANEY et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ¹ - Kind Code ² (if known)				
		DE - 4128075	03-05-1992	NEUHAUS		
		EP - 0118783	09-19-1994	TAKASAKI et al		
		EP - 0162994	12-04-1985	KREUTZER et al		
		EP - 0269001	06-01-1988	TAKASAKI		
		EP - 0308150	03-22-1989	FAULKNER et al		

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		CARROLL, "DEVELOPMENT OF INTEGRATED CABLE-TELEPHONY IN THE UNITED KINGDOM," <u>IEEE COMMUNICATIONS MAGAZINE</u> , 8/1995, Page(s) 48-50, 55-60, Number 33, Publisher: IEEE	
		CHAMBERLIN, "BRITISH TELECOM PLC (BT)-BT FULCRUM TPOON ADVANCED DEMONSTRATOR (AD) SYSTEM DESCRIPTION AND SPECIFICATION," 4/1990, Page(s) 1-8, Publisher: FULCRUM	
		CHASE ET AL., "SPREAD SPECTRUM MULTIPLE ACCESS PERFORMANCE OF ORTHOGONAL CODES IN FADING MULTIPATH CHANNELS," <u>MILITARY COMMUNICATION CONFERENCE</u> , 1988, Page(s) 143-147, Volume 1, Publisher: IEEE	
		CHIDDIX, "OPTICAL FIBER SUPER TRUNKING, THE TIME HAS COME, A PERFORMANCE REPORT ON A REAL-WORLD SYSTEM," <u>NCTA TECHNICAL PAPERS</u> , 1986, Page(s) 82-93, Publisher: NCTA	
		CHIDDIX, "FIBER OPTIC TECHNOLOGY FOR CATV SUPERTRUNK APPLICATIONS," <u>1985 NCTA TECHNICAL PAPERS</u> , 1985, Page(s) 157-165, Publisher: NCTA	
		CHIDDIX ET AL., "INTRODUCTION OF OPTICAL FIBER TRANSMISSION TECHNOLOGY INTO EXISTING CABLE TELEVISION NETWORKS AND ITS IMPACT ON THE CONSUMER ELECTRONICS INTERFACE," <u>IEEE TRANSACTIONS ON CONSUMER ELECTRONICS</u> , 5/1989, Page(s) 51-62, Volume 35, Number 2, Publisher: IEEE	
		CHOW ET AL., "A DISCRETE MULTITONE TRANSCEIVER SYSTEM FOR HDSL APPLICATIONS," <u>IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS</u> , 8/1991, Page(s) 895-908, Volume 9, Number 6, Publisher: IEEE	
		CHOW ET AL., "EQUALIZER TRAINING ALGORITHMS FOR MULTICARRIER MODULATION SYSTEMS," 1993, Page(s) 761-765, Publisher: IEEE	
		CIOFFI ET AL., "A DATA-DRIVEN MULTITONE ECHO CANCELLER," <u>GLOBECOM '91</u> , 1991, Page(s) 57-61, Publisher: IEEE	
		CITTA ET AL., "PERFORMANCE HISTORY IN TWO-WAY CABLE PLANTS UTILIZING A PSK COMMUNICATION SYSTEM," <u>1987 NCTA TECHNICAL PAPERS</u> , 1987, Page(s) 251-260, Publisher: NCTA	

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 4009343	02-22-1977	MARKEY et al.	
		US- 4053713	10-11-1977	NITADORI	
		US- 4090220	05-16-1978	GARGINI	
		US- 4092598	05-30-1978	DICKINSON et al.	
		US- 4105663	08-08-1978	KUSTKA	
		US- 4135202	01-16-1979	CUTLER	
		US- 4156647	05-29-1979	TAZAWA et al.	
		US- 4161786	07-17-1979	HOPKINS et al.	
		US- 4165168	01-22-1980	GRAUPE et al.	
		US- 4191660	05-04-1980	WEBER	
		US- 4215368	07-29-1980	DAVIDSON	
		US- 4267591	05-12-1981	WISSEL et al.	
		US- 4275452	06-23-1981	WHITE	
		US- 4290142	09-15-1981	SCHNEE et al.	
		US- 4300229	11-10-1981	HIROSAKI	
		US- 4316264	02-16-1982	HOWSON	
		US- 4316265	02-16-1982	BOBILIN et al.	
		US- 4331974	05-25-1982	COGSWELL et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		EP - 0316331	05-31-1989	BALLANCE		
		EP - 0316332	05-31-1989	BALLANCE		
		EP - 0316333	05-31-1989	BALLANCE		
		EP - 0382431	06-16-1990	HILL et al.		
		EP - 0411597	02-06-1991	SCHAFER		

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		CLARKE ET AL., "THE DESIGN OF A TDMA SYSTEM FOR PASSIVE OPTICAL NETWORKS," <u>CONFERENCE RECORD, 1990 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS</u> , 1990, Page(s) 654-658, Volume 2, Publisher: IEEE	
		"COMBINED USE OF COLLISION-RESOLUTION AND COLLISION-AVOIDANCE MEDIA-ACCESS COMMUNICATION PROTOCOLS," <u>IBM TECHNICAL DISCLOSURE BULLETIN</u> , 10/1994, Page(s) 289-301, Number 37, Publisher: IBM	
		COOK ET AL., "LOW-COST DIGITAL PASSIVE OPTICAL NETWORKS," <u>IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS</u> , 1990, Page(s) 659-662, Volume 2, Publisher: IEEE	
		DEBOT, "AN EXAMPLE OF A MULTI-RESOLUTION DIGITAL TERRESTRIAL TV MODEM," <u>CONFERENCE PROCEEDINGS, 1993 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS</u> , 5/25-26/1993, Page(s) 1785-1790, Volume 3, Publisher: IEEE, Published in: GENEVA, SWITZERLAND	
		FAULKNER, "BROADBAND PASSIVE OPTICAL NETWORK EVOLUTION," <u>CONFERENCE PROCEEDINGS, BROADBAND '89</u> , 1989, Page(s) 202-204	
		FAULKNER ET AL., "BROADBAND SYSTEMS ON PASSIVE OPTICAL NETWORKS," <u>BRITISH JOURNAL OF TELECOMMUNICATIONS TECHNOLOGY</u> , Page(s) 4, Publisher: FULCRUM	
		FAULKNER ET AL., "DIGITAL CATV VIA PASSIVE OPTICAL NETWORKS," <u>CONFERENCE PROCEEDINGS, EFQC-LAN 88</u> , 1988, Page(s) 127-130	
		"FIBER OPTICS SEMINAR," <u>CONFERENCE RECORD, SOCIETY OF CABLE TELEVISION ENGINEERS, ORLANDO, FL</u> , 1/18/1988, Page(s) 1-6, Publisher: SOCIETY OF CABLE TELEVISION ENGINEERS	
		FOX ET AL., "STAR-STRUCTURE OPTICAL LOCAL NETWORKS," <u>BRITISH TELECOMMUNICATIONS TECHNOLOGY JOURNAL</u> , 4/1989, Page(s) 75-88, Volume 7, Number 2, Publisher: FULCRUM	
		FOXTON ET AL., "OPTICALLY COUPLED REMOTE MULTIPLEXERS," <u>BRITISH TELECOMMUNICATIONS TECHNOLOGY JOURNAL</u> , 4/1989, Page(s) 55-64, Volume 7, Number 2, Publisher: FULCRUM	

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--------------------	-----------------

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		Number - Kind Code ² (if known)			
		US- 4343042	08-03-1982	SCHROCK et al.	
		US- 4367548	01-04-1983	COTTEN Jr et al.	
		US- 4367456	08-07-1983	CRETEAU	
		US- 4393493	07-12-1983	EDWARDS	
		US- 4395780	07-26-1983	GOHM et al.	
		US- 4397020	08-02-1983	HOWSON	
		US- 4404589	09-13-1983	WRIGHT, Jr.	
		US- 4438511	03-20-1984	BARAN	
		US- 4441180	04-03-1984	SCHUSSLER	
		US- 4468017	08-14-1984	BANKER	
		US- 4472802	09-18-1984	PIN et al.	
		US- 4475211	10-02-1984	MATTIS Jr et al.	
		US- 4484218	11-20-1984	BOLAND et al.	
		US- 4488004	12-11-1984	BOGART et al.	
		US- 4488294	12-11-1984	CHRISTENSEN et al.	
		US- 4491963	01-01-1985	PINNOW et al.	
		US- 4500989	02-19-1985	DAHOO	
		US- 4506367	03-19-1985	WALTER	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		EP - 0421602	04-10-1991	POWELL		
		EP - 0425732	05-05-1991	SCHAFER		
		EP - 0462495	12-27-1991	DRESSLER		
		EP - 0472824	03-04-1992	PANZER		
		EP - 0493287	07-01-1992	SAVARY et al.		

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		GRANATATI, "ECONOMIC ANALYSIS OF TELECOMMUNICATIONS LOOP ARCHITECTURES," CONFERENCE RECORD, ELECTRONICCAST CONFERENCE ON FIBER OPTICS, BEYOND THE YEAR 2000, 6/11/87.	
		GAWDUN, "LIGHTWAVE SYSTEMS IN THE SUBSCRIBER LOOP," TELECOMMUNICATIONS, 5/1987, Page(s) 65-65, Volume 21	
		GOLASA ET AL., "PERFORMANCE MONITORING FOR DIGITAL RADIO," CONFERENCE PROCEEDINGS, 1981 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 6/14-16/1981, Volume 2, Number 35.4.1 - 35.4.3, Publisher: IEEE, Published in: DENVER, CO	
		GOLDBERG, "BRAINS AND BANDWIDTH: FIBER SERVICE AT COPPER PRICES," ELECTRONIC DESIGN, 10/2/1995, Page(s) 51-60, Number 43	
		GREETHOUSE, "RAYNET, BT TEAM TO SEEK RHC HOME-FIBER SALES," BOC WEEK - EXECUTIVE BRIEFINGS ON THE BELL OPERATING COMPANIES REGIONAL HOLDING COMPANIES, 4/18/90, Page(s) 1-2, Volume 7, Number 15, Publisher: TELECOM PUBLISHING GROUP, Published in: ALEXANDRIA, VA	
		GROVER ET AL., "DESIGN AND CHARACTERIZATION OF AN ERROR-CORRECTING CODE FOR THE SONET STS-1 TRIBUTARY," IEEE TRANSACTIONS ON COMMUNICATIONS, 4/1990, Page(s) 467-476, Volume 38, Number 4, Publisher: IEEE	
		HARA, "CONCEPTUAL DESIGN OF A SWITCHED TELEVISION-DISTRIBUTION SYSTEM USING OPTICAL-FIBER WAVEGUIDES," IEEE TRANSACTIONS ON CABLE TELEVISION, 7/1977, Page(s) 120-130, Volume CATV-2, Number 3, Publisher: IEEE	
		HIGGINS, "THE DISCRETE FOURIER TRANSFORM AND THE FAST FOURIER TRANSFORM ALGORITHM," ANALOG DEVICES DIGITAL SIGNAL PROCESSING IN VLSI, 1990, Page(s) 117-173, Number 3	
		HIGHTOWER, "ECONOMIC FO SYSTEM FOR NEW RESIDENTIAL SERVICES," TELEPHONY, 3/17/86, Page(s) 44-56	
		HILL ET AL., "ADVANCED OPTICAL TECHNOLOGIES FOR THE FUTURE LOCAL NETWORK," Page(s) 111-115	

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		US-4526663	07-09-1985	CITTA	
		US-4545048	10-01-1985	HAUK et al.	
		US-4561101	12-24-1985	PINSARD et al.	
		US-4566100	01-21-1986	MIZUNO et al.	
		US-4574305	03-04-1986	CAMPBELL et al.	
		US-4575662	03-11-1986	AOYAGI et al.	
		US-4567066	05-06-1986	RODRIGUEZ	
		US-4604745	08-05-1986	TAKASAKI et al.	
		US-4613975	09-23-1986	AOYAGI et al.	
		US-4621355	11-04-1986	HIROSAKI et al.	
		US-4642666	02-10-1987	LOWRY et al.	
		US-4642806	02-10-1987	HEWITT et al.	
		US-4644535	02-17-1987	JOHNSON et al.	
		US-4651330	03-17-1987	BALLANCE	
		US-4661945	04-28-1987	HIROSAKI	
		US-4677847	06-30-1987	AOYAGI	
		US-4666667	08-11-1987	OHNSORGE	
		US-4666210	08-18-1987	EIZENHOFER et al.	
		US-4691314	08-01-1987	BERGINS et al.	

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		Country Code ³ - Number ² - Kind Code ⁵ (if known)				
		EP - 0460366	08-12-1992	CIOFFI et al.		
		EP - 0507379	10-07-1992	MESTDAGH et al.		
		EP - 0521315	01-07-1993	DRESSLER et al.		
		EP - 0578313	01-12-1994	CHOULY et al.		
		EP - 0580216	01-26-1994	DAFFARA et al.		

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		HIROSAKI ET AL. "A 19.2 Kbps VOICEBAND DATA MODEM BASED ON ORTHOGONALLY MULTIPLEXED QAM TECHNIQUES," C & C SYSTEMS RESEARCH LABORATORIES-TRANSMISSION DIVISION- NEC CORPORATION, 1985, Page(s) 661-665, Publisher: IEEE	
		HIROSAKI ET AL. "ADVANCED GROUPBAND DATA MODEM USING ORTHOGONALLY MULTIPLEXED QAM TECHNIQUE," IEEE TRANSACTIONS ON COMMUNICATIONS, 6/1986, Page(s) 587-592, Volume 34, Publisher: IEEE	
		HIROSAKI ET AL. "AN ORTHOGONALLY MULTIPLEXED QAM SYSTEM USING THE DISCRETE FOURIER TRANSFORM," IEEE TRANSACTIONS ON COMMUNICATIONS, 7/1981, Page(s) 982-989, Volume 29, Publisher: IEEE	
		"HOMEWORX FIBER IN THE LOOP SYSTEM," PRODUCT BROCHURE, 3/1992, Page(s) 1-7, Publisher: ADC TELECOMMUNICATIONS, Published in: MINNEAPOLIS, MN	
		"HOMEWORX FIBER IN THE LOOP SYSTEM," PRODUCT BROCHURE, 6/1992, Page(s) 1-3, Publisher: ADC TELECOMMUNICATIONS INC., Published in: MINNEAPOLIS, MN	
		HOPPITT ET AL. "THE PROVISION OF TELEPHONY OVER PASSIVE OPTICAL NETWORKS," BRITISH TELECOMMUNICATIONS TECHNOLOGY JOURNAL, 4/1989, Page(s) 100-114, Volume 7, Number 2	
		HORDEN. "AN FFT ALGORITHM FOR MCS-96 PRODUCTS INCLUDING SUPPORTING ROUTINES AND EXAMPLES," INTEL IMBEDDED APPLICATIONS, INTEL CORPORATION, APPLICATION NOTE AP-275, 10/1988, Page(s) 8-103 - 6-178, Publisher: INTEL CORPORATION	
		HUCKETT ET AL. "ERROR PERFORMANCE ANALYSIS OF DIGITAL TRANSMISSION SYSTEMS," TELECOMMUNICATIONS MEASUREMENTS, ANALYSIS AND INSTRUMENTATION, 1987, Page(s) 136-151, Publisher: PRENTICE-HALL, INC, Published in: NEW JERSEY	
		"PART 5 - MEDIA ACCESS CONTROL (MAC) BRIDGING OF ETHERNET V2.0 IN LOCAL AREA NETWORKS," IEEE STANDARDS 802.1H, 8/12/1997, Publisher: IEEE, Published in: NEW YORK, NY	
		"RECOMMENDED PRACTICE FOR MEDIA ACCESS CONTROL (MAC) BRIDGING OF ETHERNET V2.0 IN IEEE 802 LOCAL AREA NETWORKS," IEEE STANDARDS FOR LOCAL AND METROPOLITAN AREA NETWORKS, 1996, Page(s) 1-18, Publisher: IEEE	

Examiner
SignatureDate
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/043,818
Filing Date	1/11/2002
First Named Inventor	Dapper
Art Unit	2617
Examiner Name	William D. Cumming
Attorney Docket Number	100.070US31

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 4701911	10-20-1987	ULUG	
		US- 4705350	11-10-1987	CHENG	
		US- 4709406	11-24-1987	OMOTO	
		US- 4709418	11-24-1987	FOX	
		US- 4710924	12-01-1987	CHUM	
		US- 4727575	02-23-1988	HANSEN et al.	
		US- 4734764	03-29-1988	POCOCK et al.	
		US- 4745592	05-17-1988	GABRIAGUES	
		US- 4748889	05-31-1988	MOHR	
		US- 4757495	01-12-1988	DECKER et al.	
		US- 4758188	08-30-1988	BARNHART et al.	
		US- 4759761	09-05-1988	DOWNES et al.	
		US- 4775210	10-04-1988	FIORETTI	
		US- 4800588	01-24-1989	POSTER Jr.	
		US- 4805298	02-28-1989	SAKANE et al.	
		US- 4827473	05-02-1989	TSUZUKI et al.	
		US- 4847672	07-11-1989	HESPELT et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Y ⁴
		Country Code ³ - Number ² - Kind Code ³ (if known)				
		EP - 0598710	05-04-1994	MAU et al.		
		EP - 0730357	09-04-1996	ISAKSSON et al.		
		EP - 0735733	10-02-1998	BEVERIDGE		
		GB - 2253770	09-16-1992	HAMILTON-PIERCY et al.		
		GB - 2254984	10-21-1992	MASAMICHI et al.		

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		"SECURE DATA EXCHANGE (SDE) SUBLAYER MANAGEMENT (SUBCLAUSE 2.8) AND RECOMMENDED PRACTICE FOR SDE ON ETHERNET V2.0 IN IEEE 802 LANs," IEEE STANDARDS FOR LOCAL AND METROPOLITAN AREA NETWORKS: SUPPLEMENTS TO STANDARD FOR INTEROPERABLE LAN/MAN SECURITY (ISLS), 1992, Page(s) 1-40, Publisher: IEEE	
		ISHIO ET AL. "A TWO-WAY WAVELENGTH-DIVISION-MULTIPLEXING TRANSMISSION AND ITS APPLICATION TO A SWITCHED TV DISTRIBUTION SYSTEM," CONFERENCE RECORD, FOURTH EUROPEAN CONFERENCE ON OPTICAL COMMUNICATION, 9/12/78, Page(s) 845-865, Publisher: IEC	
		JU, "ALGORITHM OF DEFINING 1-D INDEXING FOR M-D MIXED RADIX IMPLEMENTATION," IEEE PACIFIC RIM CONFERENCE ON COMMUNICATIONS, COMPUTERS AND SIGNAL PROCESSING, 5/19/93, Page(s) 484-488, Volume 2, Publisher: IEEE	
		KIM, "VOICE FOLLOWS VIDEO," CED: COMMUNICATIONS ENGINEERING AND DESIGN, 6/1993, Page(s) 67-68, Publisher: HORIZONS	
		KIM, "HIERARCHICAL WIDEBAND MULTICARRIER CDMA SYSTEMS," VEHICULAR TECHNOLOGY CONFERENCE, IEEE VTS 543TH, 10/7/01, Page(s) 1843-1847, Publisher: IEEE	
		KNOWLES, "VLSI ARCHITECTURE FOR THE DISCRETE WAVELET TRANSFORM," ELECTRONIC LETTERS, 7/19/90, Page(s) 1184-1185, Volume 26, Number 15	
		KREIDL, "BRITISH FIBER LOOP TRIAL TO DELIVER TELEPHONE SERVICE," LIGHTWAVE, 6/1989, Page(s) 10, Number 12	
		LEMBERG, "PASSIVE OPTICAL NETWORKS FOR THE SUBSCRIBER LOOP," TUTORIAL PROGRAM, Page(s) 1-8, Publisher: BELLCORE	
		LITWIN, "AN INTRODUCTION TO MULTICARRIER MODULATION," IEEE POTENTIALS, 4/2000, Page(s) 36-38, Volume 19, Number 2, Publisher: IEEE	
		LUFF, "THE BROWARD CABLE AREA NETWORK FIBER MODEL," COMMUNICATION ENGINEERING AND DESIGN, 2/1989, Page(s) 28-42	

Examiner Signature		Date Considered	
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Substitute for form 1448A/PTO

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US-4858225	08-15-1989	deSANTIS	
		US-4862897	08-23-1989	KELLY	
		US-4862104	08-29-1989	MURATANI et al.	
		US-4866732	09-12-1989	CAREY et al.	
		US-4868811	09-19-1989	SUZUKI	
		US-4879627	11-07-1989	GEILE et al.	
		US-4881241	11-14-1989	POMMIER et al.	
		US-4881243	11-14-1989	WHITT	
		US-4891894	01-02-1990	WAY	
		US-4907233	03-06-1990	DEUTSCH et al.	
		US-4912705	03-27-1990	PANETH et al.	
		US-4912721	03-27-1990	PIDGEON, Jr et al.	
		US-4942602	07-17-1990	BAKER Jr et al.	
		US-4943960	07-24-1990	DOBSON et al.	
		US-4953197	06-28-1990	KAEWELL Jr. et al.	
		US-4959882	06-25-1990	DAVIDOV et al.	
		US-4975899	12-04-1990	FAULKNER	
		US-4975916	12-04-1990	MIRACLE et al.	
		US-4980897	12-25-1990	DECKER et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ² - Kind Code ⁵ (if known)				
		JP - 1258833	10-13-1989	WATANABE et al.		
		JP - 5002038	01-08-1993	HARUO		
		JP - 5030085	02-05-1993	SATOSHI et al.		
		JP - 5083218	04-02-1993	GOI		
		JP - 5145525	06-11-1993	MISURU et al.		

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Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		LUIKUO ET AL., "A 500 MOPS DSP CHIP SET," <u>ELECTRONIC ENGINEERING</u> , 6/1988, Page(s) 109-113, Volume 60, Number 738, Published in: WOOLWICH, LONDON	
		MANEY, "CABLE, PHONE FIRMS WRANGLE OVER FUTURE," <u>USA TODAY</u> , 2/11/1993, Page(s) 1B-2B	
		MANEY, "PHONE, CABLE DEALS LET U.S. TEST FUTURE," <u>USA TODAY</u> , 6/28/1993, Page(s) 1B-2B	
		MESIYA, "A PASSIVE OPTICAL- <u>COAX</u> HYBRID NETWORK ARCHITECTURE FOR DELIVERY OF CATV, TELEPHONY AND DATA SERVICES," <u>PROCEEDINGS FROM ELEVEN TECHNICAL SESSIONS 42ND ANNUAL CONVENTION AND EXPOSITION OF THE NCTA</u> , 6/6/1993, Page(s) 358-384, Publisher: NCTA	
		NAKAMURA ET AL., "256 QAM MODEM FOR MULTICARRIER 400 Mbit/s DIGITAL RADIO," <u>IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS</u> , 4/1987, Page(s) 329-335, Volume SAC-5, Number 3, Publisher: IEEE	
		NARAYAN ET AL., "NOISE DETECTED, FRACTIONALLY SPACED EQUALIZATION FOR ANALOG CELLULAR DATA MODEMS," <u>IEEE TRANSACTIONS ON COMMUNICATIONS</u> , FEB-MAR-APR, 1994, Page(s) 1270-1276, Volume 42, Number 2-3-4, Publisher: IEEE	
		NEWCOMBE ET AL., "ERROR RATE MONITORING FOR DIGITAL COMMUNICATIONS," <u>PROCEEDINGS OF THE IEEE</u> , 8/1982, Page(s) 805-828, Volume 70, Number 8, Publisher: IEEE, Published in: NEW YORK, NY	
		OAKLEY, "PASSIVE OPTICAL NETWORKS: THE LOW COST ROAD TO THE FUTURE," <u>BROADBAND '89</u> , 1989, Page(s) 313-318	
		OAKLEY, "FIBRE TO THE HOME - THE PASSIVE BUS WAY," <u>PRODUCT LITERATURE, BRITISH TELECOM NETWORK SYSTEMS ENGINEERING AND TECHNOLOGY</u> , 1988, Page(s) 1-20	
		"OFDM: AN ALTERNATIVE DIGITAL MODULATION SCHEME," 1993, Page(s) 3-6, Publisher: CABLE TELEVISION LABORATORIES, INC.	

Examiner Signature	Date Considered
--------------------	-----------------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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First Named Inventor	Dapper
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Examiner Name	William D. Cumming
Attorney Docket Number	100.070US31

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 4891133	02-05-1991	DAVIS et al.	
		US- 4908244	03-05-1991	LEE et al.	
		US- 5005163	04-02-1991	CAREY et al.	
		US- 5010586	04-23-1991	MORTIMORE et al.	
		US- 5014267	05-07-1991	TOMPKINS et al.	
		US- 5022024	06-04-1991	PANETH et al.	
		US- 5029164	07-02-1991	GOLDSTEIN et al.	
		US- 5042000	08-20-1991	BALDWIN	
		US- 5054050	10-01-1991	BURKE et al.	
		US- 5058133	10-15-1991	DUNCANSON et al.	
		US- 5083595	11-05-1991	BALLANCE	
		US- 5072441	12-10-1991	SZWARE	
		US- 5086470	02-04-1992	BALLANCE	
		US- 5088111	02-11-1992	McNAMARA et al.	
		US- 5091906	02-25-1992	REED et al.	
		US- 5095462	03-10-1992	GRALLERT	
		US- 5101290	03-31-1992	ENG et al.	
		US- 5103459	04-07-1992	GILHOUSEN et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ¹ - Number ² - Kind Code ³ (if known)				
		JP - 11177550	07-02-1998	OTA et al.		
		WO - 8805233	07-14-1988	FAULKNER et al.		
		WO - 8904093	11-17-1988	FAULKNER et al.		
		WO - 8905070	06-01-1989	BALLANCE		

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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Application Number	10/043,818
Filing Date	1/11/2002
First Named Inventor	Dapper
Art Unit	2617
Examiner Name	William D. Cumming
Attorney Docket Number	100.070US31

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		"OMAHA SELECTED FOR BROADBAND ROLL-OUT," <u>US WEST TODAY</u> , 4/26/93, Page(s) 1	
		OPPENHEIM ET AL., "COMPUTATION OF THE DISCRETE FOURIER TRANSFORM," <u>DISCRETE-TIME SIGNAL PROCESSING</u> , 1989, Page(s) 581-661, Publisher: PRENTICE-HALL	
		PAYNE ET AL., "AN ADVANCE DEMONSTRATION SYSTEM FOR TPO, PROGRAM AND ABSTRACTS," <u>IEEE WORKSHOP ON PASSIVE OPTICAL NETWORKS FOR THE LOCAL LOOP</u> , 5/8/1990, Page(s) 1-8, Publisher: IEEE	
		"PDSP16510 STAND ALONE FFT PROCESSOR," <u>PLESSEY DSP DATABOOK</u> , 1991, Page(s) 127-145, Publisher: PLESSEY SEMICONDUCTORS	
		PERSONICK, "ANALOG LINKS FOR VIDEO, TELEMETRY, I.F. AND I.F. REMOTING," <u>FIBER OPTICS: TECHNOLOGY AND APPLICATIONS</u> , 1985, Page(s) 194-215, Publisher: PLENUM PRESS, Published in: NEW YORK, NY	
		PERSONICK ET AL., "BROADBAND NETWORKS," <u>FIBER OPTICS: TECHNOLOGY AND APPLICATIONS</u> , 1985, Page(s) 216-223, Publisher: PLENUM PRESS, Published in: NEW YORK, NY	
		RABINER ET AL., "SPECTRUM ANALYSIS AND THE FAST FOURIER TRANSFORM," <u>THEORY AND APPLICATION OF DIGITAL SIGNAL PROCESSING</u> , 1993, Page(s) 356-438	
		RAMAKRISHNA ET AL., "A TESTABLE CMOS SIGNAL PROCESSOR FOR FAST FOURIER TRANSFORMS," <u>PROCEEDINGS, 1988 IEEE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS</u> , 6/7-9/1988, Page(s) 73-76, Volume 1, Publisher: IEEE	
		RAMASWAMI ET AL., "ANALYSIS FOR THE LINK ERROR MONITORING ALGORITHM/S IN THE SIGNALING SYSTEM NUMBER 7 PROTOCOL," 1993, Page(s) 859-866, Publisher: IEEE	

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Considered

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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First Named Inventor	Dapper
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Sheet 17 of 30

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		Number - Kind Code ² (if known)			
		US- 5111460	05-05-1992	BOTZENHARDT et al.	
		US- 5111497	05-05-1992	BLIVEN et al.	
		US- 5115451	05-19-1992	FURLONG	
		US- 5125100	08-23-1992	KATZNELSON	
		US- 5136411	08-04-1992	PAIK et al.	
		US- 5136335	08-11-1992	BALLANCE	
		US- 5142532	08-25-1992	ADAMS	
		US- 5153784	10-06-1992	FAULKNER et al.	
		US- 5157859	10-20-1992	SCHENKEL	
		US- 5166924	11-24-1992	MOOSE	
		US- 5170470	12-08-1992	PINDAR et al.	
		US- 5173889	12-22-1992	BALLANCE	
		US- 5175817	12-29-1992	ADAMS et al.	
		US- 5185736	02-09-1993	TYRRELL et al.	
		US- 5185738	02-09-1993	KELLY	
		US- 5185742	02-09-1993	BALES et al.	
		US- 5191459	03-02-1993	THOMPSON et al.	
		US- 5191976	03-02-1993	COMMIER et al.	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO - 8905077	06-01-1989	BALLANCE		
		WO - 9014733	11-29-1990	FAULKNER et al.		
		WO - 9014734	11-29-1990	FAULKNER et al.		
		WO - 9108623	06-13-1991	CLARKE		
		WO - 9109478	06-27-1991	COOPER et al.		

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		REEVE ET AL., "DESIGN OF PASSIVE OPTICAL NETWORKS," <u>BRITISH TELECOMMUNICATIONS TECHNOLOGY JOURNAL</u> , 4/1989, Page(s) 69-99, Volume 7, Number 2, Publisher: FULCRUM	
		REGNAULT, "A RANGE OF EASY-TO-BUILD RFI FILTERS, COAXIAL STUB FILTERS," 1994-1997, Page(s) 1-7, Publisher: http://www.fwtech.co.uk/g3sek/swofiltr/swofiltr.html	
		ROGAN ET AL., "A TECHNICAL ANALYSIS OF A HYBRID FIBER-COAXIAL CABLE TELEVISION SYSTEM," 1988 NCTA TECHNICAL PAPERS, 1988, Page(s) 83-93, Publisher: NCTA	
		SCHMIDT, "DAS SIGFON-SYSTEMKONZEPT ANFORDERUNGEN UND AUFGABENSTELLUNG (MEDIA POLICY ASPECTS)," <u>NACHRICHTENTECHNISCHE BERICHTE (COMMUNICATIONS ENGINEERING REPORTS)</u> , 5/1984, Page(s) 5-12	
		SCHNEIDAWIND, "BELL'S BRASH CEO BETS BIG ON TV DREAM," <u>USA TODAY</u> , 4/22/1993, Page(s) 1-2	
		SCHREIER ET AL., "BANDPASS SIGMA-DELTA MODULATION," <u>ELECTRONICS LETTERS</u> , 11/9/1989, Page(s) 1560-1561, Volume 25, Number 23	
		SETTLE ET AL., "TRADE-OFF BETWEEN SNR AND ISI IN MULTI-CHANNEL ZERO-FORCING EQUALIZERS," <u>PROCEEDINGS, NINTH IEEE SP WORKSHOP ON STATISTICAL SIGNAL AND ARRAY PROCESSING</u> , 5/1988, Page(s) 96-99, Publisher: IEEE	
		SHARROCK ET AL., "A BROADBAND-BASED INTEGRATED VOICE-DATA-VIDEO NETWORK OF MULTIPLE LANS WITH DYNAMIC BANDWIDTH ALLOCATION," <u>PROCEEDINGS, IEEE INFORCOM '87</u> , 3/31/1987, Page(s) 417-425, Publisher: IEEE	

Examiner Signature		Date Considered	
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Substitute for form 1448A/PTO

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		Number - Kind Code ² (if known)			
		US- 5193103	03-09-1993	SINGH et al.	
		US- 5193109	03-09-1993	CHEN-YEH LEE	
		US- 5197061	03-23-1993	HALBERT-LASSALLE et al.	
		US- 5206886	04-27-1993	BINGHAM	
		US- 5208812	05-04-1993	DUDEK et al.	
		US- 5216696	06-01-1993	POKLEMA	
		US- 5225902	07-06-1993	McMULLAN, Jr	
		US- 5226081	07-06-1993	HINOKIMOTO	
		US- 5228025	07-13-1993	Le FLOCH et al.	
		US- 5235619	08-10-1993	BEYERS, II et al.	
		US- 5243598	09-07-1993	LEE	
		US- 5245459	09-14-1993	FAULKNER et al.	
		US- 5255088	10-19-1993	McMULLAN, Jr. et al.	
		US- 5274629	12-28-1993	HELARD et al.	
		US- 5278889	01-11-1994	PAPANICOLAOU et al.	
		US- 5282023	01-25-1994	SCARPA	
		US- 5289474	02-22-1994	PURCELL et al.	
		US- 5293329	03-08-1994	WISHART et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO - 9111887	08-08-1991	CLARKE		
		WO - 9115925	10-17-1991	MASON et al.		
		WO - 9207431	04-30-1992	CLARKE et al.		
		WO - 9207432	04-30-1992	CLARKE et al.		
		WO - 9216063	09-17-1992	PHILIPS		

Examiner
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Application Number	10/043,818
Filing Date	1/11/2002
First Named Inventor	Dapper
Art Unit	2617
Examiner Name	William D. Cumming
Attorney Docket Number	100.070US31

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		SHENG ET AL., "A MONOLITHIC CMOS RADIO SYSTEMS FOR WIDEBAND CDMA COMMUNICATIONS," <u>WIRELESS '94</u> , 1994, Publisher: http://citeseer.ist.psu.edu/sheng94monolithic , Published in: CALGARY, CANADA	
		SHI, "EMPLOYING THE OFDM TECHNIQUE IN HYBRID MULTICHANNEL ANALOG-DIGITAL TRANSMISSION OVER THE HFC NETWORK," Page(s) 339-348	
		STARK, "AM TRANSMISSION ON FIBER," <u>COMMUNICATIONS ENGINEERING AND DESIGN</u> , 4/1988, Page(s) 20-32	
		STERN ET AL., "PASSIVE OPTICAL LOCAL NETWORKS FOR TELEPHONY APPLICATIONS AND BEYOND," <u>ELECTRONICS LETTERS</u> , 11/19/87, Page(s) 1255-1257, Volume 23, Number 24, Publisher: IEEE	
		STROM ET AL., "NEAR-FAR RESISTANT PROPAGATION DELAY ESTIMATORS FOR ASYNCHRONOUS DIRECT-SEQUENCE CODE DIVISION MULTIPLE ACCESS SYSTEMS," http://citeseer.ist.psu.edu/strom94nearfar	
		SUNADA ET AL., "COBRA: AN 1.2 MILLION TRANSISTOR EXPANDABLE COLUMN FFT CHIP," <u>PROCEEDINGS OF THE 1994 IEEE INTERNATIONAL CONFERENCE ON COMPUTER DESIGN: VLSI IN COMPUTERS AND PROCESSING</u> , 10/10/1994, Page(s) 546-550, Publisher: IEEE	
		TIETZE ET AL., "IN: HALBLEITER-SCHALTUNGSTECHNIK (SEMICONDUCTOR SWITCHING TECHNIQUE - TRANSLATION)," 1990, Page(s) 619-620, Publisher: SPRINGER VERLAG	

Examiner Signature	Date Considered
--------------------	-----------------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1448A/PTO

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 5293362	03-08-1994	CARSON et al.	
		US- 5297138	03-22-1994	SOPRANO et al.	
		US- 5299192	03-29-1994	GUO et al.	
		US- 5299201	03-29-1994	CARUSONE Jr. et al.	
		US- 5307376	04-26-1994	CASTELAIN et al.	
		US- 5313169	05-17-1994	FOUCHE et al.	
		US- 5315584	05-24-1994	SAVARY et al.	
		US- 5317596	05-31-1994	HO et al.	
		US- 5323391	08-21-1994	HARRISON	
		US- 5329652	07-12-1994	de COUASNON et al.	
		US- 5331842	07-19-1994	VALLEY et al.	
		US- 5337175	08-09-1994	OHNSORGE et al.	
		US- 5341385	08-23-1994	CLARKE	
		US- 5343489	08-30-1994	JASPER et al.	
		US- 5347304	09-13-1994	MOURA et al.	
		US- 5348632	09-13-1994	FILEPP et al.	
		US- 5351245	09-27-1994	PREGONT et al.	
		US- 5353307	10-04-1994	LESTER et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO - 9300760	01-07-1993	ARWEILER et al.		
		WO - 9311816	06-10-1993	MULLER		
		WO - 9407314	03-31-1994	SYKES et al.		
		WO - 9429978	12-22-1994	WADMAN et al.		
		WO - 9503606	02-02-1995	ISAKSSON et al.		

Examiner
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Considered

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		VON DER EMBSE, "HIGH DYNAMIC RANGE FFT PROCESSORS FOR MULTIPLE CHANNEL RECEIVERS," <u>CONFERENCE RECORD, WESCON-80</u> , 9/16/80, Page(s) 1-13	
		WEI ET AL., "SYNCHRONIZATION REQUIREMENTS FOR MULTI-USER OFDM ON SATELLITE MOBILE AND TWO-PATH RAYLEIGH FADING CHANNELS," <u>IEEE TRANSACTIONS ON COMMUNICATIONS</u> , FEB - APR, 1995, Page(s) 887-895, Volume 43, Number 2-4, Publisher: IEEE, Published in: NEW YORK, NY	
		WEINSTEIN ET AL., "DATA TRANSMISSION BY FREQUENCY-DIVISION MULTIPLEXING USING THE DISCRETE FOURIER TRANSFORM," <u>IEEE TRANSACTIONS ON COMMUNICATION TECHNOLOGY</u> , 10/1971, Page(s) 828-834, Volume 19, Number 3, Publisher: IEEE	
		WILLIAMSON, "BIG BUSINESS DRIVES U.K. LOCAL FIBER," <u>TELEPHONY</u> , 8/28/1989, Page(s) 28-32	
		WILSON, "ADC LAUNCHES FIBER-COAX PLATFORM," <u>TELEPHONY</u> , 5/24/1993, Page(s) 1-2	
		WOODWARD ET AL., "TIME-SPREAD DECODING: A METHOD FOR THE IMPLEMENTATION OF ERROR-CONTROL ALGORITHMS IN FAST DIGITAL TRANSMISSION CHANNELS USING SLOW MICROPROCESSORS," <u>CONFERENCE PROCEEDINGS, DIGITAL PROCESSING OF SIGNALS IN COMMUNICATIONS</u> , 4/2-28/1993, Page(s) 119-124	
		YANG, "PERFORMANCE ANALYSIS OF MULTICARRIER MODEMS IN AN OFFICE ENVIRONMENT USING 3D RAY TRACING", 1994, Page(s) 42-46, Publisher: IEEE	
		ZEIGER, "U.S. WEST PICKS OMAHA TO TEST NEW DATA NETWORK," <u>THE DENVER POST</u> , 4/24/1993, Page(s) 1C-2C	

Examiner Signature	Date Considered
--------------------	-----------------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1448A/PTO

**INFORMATION DISCLOSURE
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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 5355401	10-11-1994	SKINNER Sr.	
		US- 5357249	10-18-1994	AZAREN et al.	
		US- 5357502	10-18-1994	CASTELAIN et al.	
		US- 5371761	12-06-1994	DAFFARA et al.	
		US- 5373502	12-13-1994	TURBAN	
		US- 5381459	01-10-1995	LAPPINGTON	
		US- 5408260	04-18-1995	ARNON	
		US- 5408681	04-18-1995	RESSLER et al.	
		US- 5416787	05-16-1995	KOPPELAAR et al.	
		US- 5416801	05-16-1995	CHOULY et al.	
		US- 5430799	07-04-1995	KATZNELSON	
		US- 5440288	08-08-1995	TAGA et al.	
		US- 5446727	08-29-1995	BRUCKERT et al.	
		US- 5448918	08-29-1995	LAMY	
		US- 5454037	09-26-1995	PACELLA	
		US- 5455547	10-03-1995	LIN et al.	
		US- 5487384	11-14-1995	SKINNER, Sr.	
		US- 5489495	11-21-1995	BEVERIDGE	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO - 9608228	03-23-1995	THOMPSON et al.		
		WO - 9608894	03-30-1995	BEHRENS et al.		
		WO - 9627352	10-12-1995	PAFF et al.		
		WO - 9634168	12-14-1995	DE BOT		
		WO - 9610303	04-04-1996	ROBERTS et al.		

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (drawn)			
		US- 5479168	12-26-1995	JOHNSON et al.	
		US- 5487066	01-23-1996	McNAMARA et al.	
		US- 5488283	02-27-1996	COWE	
		US- 5499047	03-12-1996	TERRY et al.	
		US- 5499236	03-12-1996	GIALLORENZI et al.	
		US- 5499273	03-12-1996	KULL et al.	
		US- 5507034	04-09-1996	BODIN et al.	
		US- 5509003	04-16-1996	SNIDERS et al.	
		US- 5512937	04-30-1996	BEERLE	
		US- 5513184	04-30-1996	VANNUCCI	
		US- 5513248	04-30-1996	EVANS et al.	
		US- 5519830	05-21-1996	OPOCZYNSKI	
		US- 5526348	06-11-1996	ICHIYOSHI	
		US- 5528283	06-18-1996	BURTON	
		US- 5528582	06-18-1996	BODEEP et al.	
		US- 5533012	07-02-1996	FUKASAWA et al.	
		US- 5534613	07-09-1996	MAJETI et al.	
		US- 5535208	07-09-1996	BESTLER et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO - 8817455	06-06-1996	ENGSTROM et al.		
		WO - 8824989	08-15-1996	DAPPER et al.		
		WO - 8824986	08-15-1996	ANDERSON et al.		
		WO - 8837082	11-21-1996	LANGLAIS		
		WO - 8748197	12-18-1997	DAPPER et al.		

Examiner
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**INFORMATION DISCLOSURE
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Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US- 5537443	07-19-1996	YOSHINO et al.	
		US- 5541955	07-30-1996	JACOBSMEYER	
		US- 5548119	08-13-1996	BESTLER et al.	
		US- 5553064	09-03-1996	PAFF et al.	
		US- 5553078	09-03-1996	BEHTASH et al.	
		US- 5557839	09-17-1996	HEKKILA et al.	
		US- 5559853	09-24-1996	BEVERIDGE	
		US- 5570964	10-29-1996	BAR-DAVID	
		US- 5576702	11-19-1996	SAMOYLENKO	
		US- 5579321	11-26-1996	VAN GRINSVEN et al.	
		US- 5584051	12-10-1996	GOKEN	
		US- 5586121	12-17-1996	MOURA et al.	
		US- 5588413	12-31-1996	STONE et al.	
		US- 5592470	01-07-1997	RUDRAPATNA et al.	
		US- 5592540	01-07-1997	BEVERIDGE	
		US- 5594726	01-14-1997	THOMPSON et al.	
		US- 5598804	01-21-1997	CIOFFI et al.	
		US- 5600672	02-04-1997	OSHIMA et al.	

Examiner
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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 5608725	02-25-1997	HART	
		US- 5610944	03-11-1997	MAU et al.	
		US- 5617146	04-01-1997	MONTGOMERY	
		US- 5631846	05-20-1997	SZURKOWSKI	
		US- 5646935	07-06-1997	ISHIKAWA et al.	
		US- 5655066	08-05-1997	OPOCZYNSKI	
		US- 5659351	08-19-1997	HUBER	
		US- 5666293	09-09-1997	METZ et al.	
		US- 5673252	09-30-1997	JOHNSON et al.	
		US- 5673291	09-30-1997	DENT	
		US- 5708961	01-13-1998	HYLTON et al.	
		US- 5715242	02-03-1998	ORTEL et al.	
		US- 5719672	02-17-1998	DUBBERLY et al.	
		US- 5745637	04-28-1998	FUHRMANN	
		US- 5751766	05-12-1998	KLETSKY et al.	
		US- 5754650	05-19-1998	KATZNELSON	
		US- 5765097	06-09-1998	DAIL	
		US- 5771469	06-23-1998	BLASING et al.	

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 5774689	08-30-1998	CURTIS et al	
		US- 5784597	07-21-1998	CHIU et al	
		US- 5784863	07-21-1998	SISTANIZADEH et al.	
		US- 5787483	07-28-1998	JAM et al	
		US- 5790607	08-04-1998	BURKE et al.	
		US- 5793759	08-11-1998	RAKIB et al	
		US- 5794119	08-11-1998	EVANS et al.	
		US- 5802117	09-01-1998	GHOSH	
		US- 5802173	09-01-1998	HAMILTON-PIERCY et al.	
		US- 5802278	09-01-1998	ISFELD et al.	
		US- 5809431	09-15-1998	BUSTAMANTE et al.	
		US- 5884821	01-26-1999	KATZNELSON	
		US- 5878325	03-02-1999	DAIL	
		US- 5898382	04-20-1999	DAVIS et al	
		US- 5907586	05-25-1999	KATSURAGAWA et al.	
		US- 5910970	06-08-1999	LU	
		US- 5933454	08-03-1999	CIOFFI	
		US- 5948322	08-31-1999	MOURA et al.	

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 5958338	09-21-1999	GHAIBEH	
		US- 5959660	09-28-1999	LEVAN	
		US- 5963557	10-05-1999	ENG	
		US- 5968378	10-12-1999	RAKIB et al.	
		US- 5969584	10-19-1999	HUANG et al.	
		US- 5987061	11-16-1999	CHEN	
		US- 5991308	11-23-1999	FUHRMANN et al.	
		US- 5995539	11-30-1999	MILLER	
		US- 5999970	12-07-1999	KRISBERGH et al.	
		US- 6002722	12-14-1999	WU	
		US- 6005881	12-21-1999	HUMPLEMAN	
		US- 6011950	01-04-2000	YOUNG	
		US- 6021158	02-01-2000	SCHURR et al.	
		US- 6021423	02-01-2000	NAG et al.	
		US- 6038251	03-14-2000	CHEN	
		US- 6041058	03-21-2000	BIGHAM et al.	
		US- 6044107	03-29-2000	GATHERER et al.	
		US- 6055242	04-25-2000	DOSHI et al.	
		US- 6055288	04-25-2000	TIMM et al.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

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U.S. PATENT DOCUMENTS

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		Number - Kind Code ² (if known)			
		US- 8058307	05-02-2000	GARNER	
		US- 8075972	06-13-2000	LAUBACH et al	
		US- 8067738	08-01-2000	PROCTOR et al	
		US- 8141545	10-31-2000	THOMAS et al	
		US- 8243369	06-05-2001	GRIMWOOD et al	
		US- 8275990	08-14-2001	DAPPER et al.	
		US- 8279158	08-21-2001	GEILE et al	
		US- 8282883	09-28-2001	DAPPER et al.	
		US- 8292851	09-18-2001	DAPPER et al.	
		US- 8307868	10-23-2001	RAKIB et al	
		US- 8330241	12-11-2001	FORT	
		US- 8334219	12-25-2001	HILL et al.	
		US- 8338201	01-01-2002	GEILE et al	
		US- 8358555	03-12-2002	RAKIB et al	
		US- 8388585	04-02-2002	DAPPER et al.	
		US- 8415133	07-02-2002	BREDE et al.	
		US- 8418558	07-09-2002	ROBERTS et al.	
		US- 8428883	07-30-2002	RAKIB et al	

Examiner Signature		Date Considered	
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		Number - Kind Code ² of Number			
		US- 8434583	08-13-2002	DAPPER et al.	
		US- 8467092	10-15-2002	GEILE et al.	
		US- 8477354	11-05-2002	ROBERTS et al.	
		US- 8467405	11-26-2002	DAPPER	
		US- 8510229	01-21-2003	GEILE	
		US- 8535715	03-18-2003	DAPPER et al.	
		US- 8577842	06-10-2003	FLIOLEK et al.	
		US- 8594322	07-15-2003	DAPPER et al.	
		US- 8603622	08-05-2003	BREDE et al.	
		US- 8608361	08-12-2003	DAPPER et al.	
		US- 8606635	08-19-2003	GEILE et al.	
		US- 8662367	12-09-2003	DAPPER et al.	
		US- 7069577	06-27-2006	GEILE et al.	
		US- 7079549	07-18-2006	CIOFFI et al.	
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